

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number
WO 2004/052079 A2

(51) International Patent Classification: Not classified (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/US2003/039346

(22) International Filing Date: 10 December 2003 (10.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 60/432,388 10 December 2002 (10.12.2002) US

(71) Applicant (*for all designated States except US*): THE WISTAR INSTITUTE [US/US]; 3601 Spruce Street, Philadelphia, PA 19104-4268 (US).

(72) Inventor; and

(75) Inventor/Applicant (*for US only*): KHILLAN, Jaspal, S. [IN/US]; 35 Lakeview Drive, Cherry Hill, NJ 08033 (US).

(74) Agents: LICATA, Jane, Massey et al.; Licata & Tyrrell P.C., 66 East Main Street, Marlton, NJ 08053 (US).

(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 2004/052079 A2

(54) Title: METHOD FOR PROGRAMMED DIFFERENTIATION OF STEM CELLS

(57) Abstract: Provided is a method for programming the differentiation of stem cells and for the identification of the signals responsible for cell lineage establishment of differentiated cells.